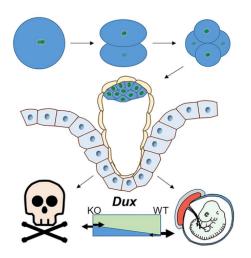
# Conditional DUXC knockout mouse model

A conditional DUXC knockout mouse model for use as a basic research tool.



# **Technology ID**

2023-164

# Category

Life Sciences/Research Tools

### Learn more



## **Applications**

Basic research tool

### **Technology Overview**

Organism: Mus musculus, mouse

Background: C57BL/6

**Product format:** Live animals

**Description:** The Double homeobox (Dux) gene is a repeated gene array in humans and mice. In a C57BL/6 mouse background, this array was replaced with a single copy of the repeat containing the DUXC gene flanked by loxP sites at both ends. This created a conditional allele that can be deleted with Cre expression. Briefly, mouse Dux is not essential for viability or fertilization nor for zygotic genome activation, however the knockout embryos exhibit postimplantation development failures.

# **Phase of Development**

#### TRL: 7-8

Conditional DUXC knockout mice have been generated, characterized, and published.

# **Desired Partnerships**

This technology is now available for:

- License
- Sponsored research
- Co-development

Please contact our office to share your business' needs and learn more.

# Researchers

• Michael Kyba, PhD, Pofessor, Department of Pediatrics

### References

 Darko Bosnakovski, Micah D Gearhart, Si Ho Choi, Michael Kyba(January 2021), https://doi.org/10.1093/biolre/ioaa179, https://academic.oup.com/biolreprod/article/104/1/83/5913241, 104, 83–93